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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,293	10/06/2000	Takehiko Shigefuji	P19894	1800

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EXAMINER

GOODMAN, CHARLES

ART UNIT PAPER NUMBER

3724

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/680,293

Applicant(s)

SHIGEFUJI ET AL.

Examiner

Charles Goodman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-38 is/are pending in the application.
- 4a) Of the above claim(s) 15-19 and 23-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Request for Reconsideration filed on 7/15/05 has been entered.

Election/Restrictions

2. Claims 15-19 and 23-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group and Species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 12.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 14, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anjo (US 5,056,014).

Anjo discloses the invention substantially as claimed including, inter alia, identification media (45) on a punch (17) and a punch identification media reader (43, 51). In Anjo, the media identifies both the punch and the corresponding die; hence, Anjo lacks a separate identification reader and arguably a separate identification media for the die. However, providing a separate reader and identification media for the die are deemed to be an obvious addition to Anjo since the single medium reader as taught by Anjo is capable of reading media from both the punch and the die and since both a punch and die are of equal importance in Anjo due to the fact that in a punching operation, the punch and die must work together to punch. Moreover, for a given punch

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of specific design, i.e. dimensions and shape, there must be a corresponding die for that given punch as is well known in the art. For example, a punch having a round punching face with a diameter of 10 mm cannot work with a die having a 15 mm diameter circular opening because that would not allow for the desired punch pattern, i.e. the larger diameter opening causes the typical web material (usually a sheet of metal) to deform in the area of the diameter difference between the punch and die and the resulting punched hole would not be bur free. On the other hand, a die having a 10.1-11 mm diameter circular opening (or any opening within close tolerances that facilitate passage of the punch therethrough) is the die that the ordinarily skilled artisan would associate with the 10 mm punch because this die allows for a substantially bur free punched hole, i.e. the difference in diameters between the punch and the die is substantially small enough to prevent burring (ragged edges in the punched hole opening) during the punching operation. Thus, it would have been obvious to the ordinary artisan at the time of the instant invention to provide the method of Anjo with an additional reader, albeit for the die, and a separate identification media for the die containing information specific to the die in order to facilitate, in addition to the reasons stated *supra*, enhanced tool exchange management of the punches, dies and combinations thereof, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art, *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8, and since (with respect to the die media) it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Regarding the “minimizing” and “efficiency” aspect in the claims, these are deemed to be obvious parameters in which the ordinarily skilled artisan takes into consideration when operating the punching processes although Anjo, alone or modified, may lack specific references to this feature. Moreover, such minimizing is inherent in Anjo because according to Applicant’s disclosure, tool replacements are minimized merely by allowing the control to select the tools mounted on the turret. Note Application Specification, p. 24, ll. 2-5. In line with the instant application definition, then Anjo, alone or modified, inherently performs the same due to the fact that each of the punches and dies are identified on the turret and the operator selects the combinations proper for the operation. Note c. 3, ll. 5-9 and c. 4, ll. 22-29.

5. Claims 14, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anjo (US 5,056,014) in view of Kamada (US 5,595,560) and Watanabe (US 5,297,022).

Anjo discloses the invention substantially as claimed including, inter alia, identification media (45) on a punch (17) and a punch identification media reader (43, 51). In Anjo, the media identifies both the punch and the corresponding die; hence, Anjo lacks a separate identification reader and arguably a separate identification media for the die. However, providing a separate reader and identification media for the die are deemed to be an obvious addition to Anjo since the single medium reader as taught by Anjo is capable of reading media from both the punch and the die and since both a punch and die are of equal importance in Anjo due to the fact that in a punching operation, the punch and die must work together to punch. Note c. 4, ll. 30-32. To further expand this point, for a given punch of specific design, i.e. dimensions and

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shape, there must be a corresponding die for that given punch as is well known in the art. For example, one of ordinary skill in the art would not have a punch having a circular punching face with a diameter of 10 mm cooperating with a die having a 15 mm diameter circular opening because that would not allow for the desired punch pattern, i.e. the larger diameter opening causes the typical web material (usually a sheet of metal) to deform in the area of the diameter difference between the punch and die and the resulting punched hole would not be bur free. On the other hand, a die having a 10.1-11 mm diameter circular opening (or any opening within close tolerances that facilitate passage of the punch therethrough) is the die that the ordinarily skilled artisan would associate with the 10 mm punch because this die allows for a substantially bur free punched hole, i.e. the difference in diameters between the punch and the die is substantially small enough to prevent burring (ragged edges in the punched hole opening) during the punching operation. Kamada's teachings illustrate this point. Kamada teaches a die management method for punch presses wherein both the punch (16) and the die (18) have their own separate identification media and this information is read by an identification media reader (40). See c. 5, l. 51 - c. 6, l. 14. At the very least Kamada teaches that an identification reader for a punch may also be used to read a die; that the correlation of, e.g. shape, of the punch is important with respect to the die (c. 6, ll. 19-24); and that having a separate identification media for the die allows for better management of both the punches and dies and combinations thereof. Note e.g. c. 1, ll. 50-62. Moreover, an important teaching with respect to Kamada is that the condition and replacement schedule for the punches and dies are controlled separately, which allows for better management of the tool parts by not having to change the tools when it

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is not necessary to so perform, i.e. "efficiency". Therefore, it would have been obvious to the ordinary artisan at the time of the instant invention to provide the method of Anjo with an additional reader, albeit for the die and a separate identification media for the dies as taught and suggested by Kamada in order to facilitate enhanced tool exchange management of the punches, dies and combinations thereof, since with respect to the separate reader it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding the "minimizing" and "efficiency" aspect in the claims, these are deemed to be obvious parameters in which the ordinarily skilled artisan takes into consideration when operating the punching processes although Anjo, alone or modified, may lack specific references to this feature. Moreover, such minimizing is inherent in Anjo because according to Applicant's disclosure, tool replacements are minimized merely by allowing the control to select the tools mounted on the turret. Note Application Specification, p. 24, ll. 2-5. In line with the instant application definition, then Anjo, alone or modified, inherently performs the same due to the fact that each of the punches and dies are identified on the turret and the operator selects the combinations proper for the operation. Note c. 3, ll. 5-9 and c. 4, ll. 22-29. To underline this point, Watanabe teaches that it is old and well known in the art that in programming a machining operation, minimizing tool changing operations is a well known programming feature to the ordinary artisan, all in the name of efficiency. Note c. 4, l. 63 - c. 5, l. 25 with specific reference to c. 5, ll. 10-13. Therefore, since it has been argued that Anjo lacks this feature, it would have been obvious to the ordinary artisan at

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the time of the instant invention to provide the modified method of Anjo with the programming step of minimizing the number of punch and die replacements as taught and suggested by Watanabe in order to facilitate efficient operation of the punch press by maximizing tool usage.

Response to Arguments

6. Applicant's arguments filed 7/15/05 have been fully considered but they are not persuasive.

In response to Applicant's basic argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Moreover, it is not clear how hindsight reasoning exists when the teachings of the prior art as a whole clearly indicate that bar codes and at least a reader therefore are known in the art and utilized to manage the tool changing operations. All of the claimed "efficiency", "minimizing", and "maximizing" are parameters that one of ordinary skilled in the art already recognize and practice. Notably, the arguments lack any substantive points as to why this would not inherently be part and parcel of the teachings of the prior art since those teachings include the knowledge of the ordinary artisan and his/her practices, and the Examiner's response to the same point in the last Office Action is

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incorporated in full. Applicant's statement that "minimizing of replacement of punches and dies is not necessarily a feature of ANJO..." without more fails to distinguish. Both Anjo and Kamada are concerned with management of the tools, Anjo with mostly a punch and die set while Kamada deals with punches and dies individually in whatever combination they may be best utilized. "Management" by definition includes efficient operation.

In response to Applicant's only substantive argument in that Anjo, modified, lacks a separate reader, this argument is traversed. Anjo's single reader and Applicant's two readers both read the same information. The obtained information is also utilized in substantially the same manner, i.e. managing the tools. Anjo modified by the teachings of Kamada would have separate bar codes for each punch and die rather than a set. This provides better management of tools simply because tools will be interchanged or replaced when necessary for a specific purpose. Applicant's invention is expanding on this concept by having two readers as opposed to one. This is an obvious modification to one of ordinary skill in the art to the extent that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Goodman whose telephone number is (571) 272-4508. The examiner can normally be reached on Monday-Thursday between 7:30 AM to 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap, can be reached on (571) 272-4514. In lieu of mailing, it is encouraged that all formal responses be faxed to **(571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

cg

October 2, 2005



Charles Goodman
Primary Examiner
AU 3724

CHARLES GOODMAN
PRIMARY EXAMINER